## Nitrous 940-cube 1972 Holden LJ Torana

## **Proflo Performance ups the street-car ante with this 940ci Holden LJ Torana** 31 MAR 2020

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WENTY years ago we had a pretty good handle on the concept of what a street car was – 12s were quick and 530hp won you Horsepower Heroes. Today we have road-registered seven-second cars making 2500rwhp, and Sydney's ProFlo Performance want to push the concept even further. This article was first published in the February 2020 issue of Street Machine



"Basically our client Milan wanted something different, which is hard, as everything has been done," says ProFlo boss and street machining legend Paul Sant. He's referring to the LJ Torana he whipped the covers off at Summernats 33, which packs a mountainous 940ci, 1600hp Sonny's motor.

"Putting this engine in a small car, and with the wheel concept, was different," he continues. "I think people can relate to a street car more. I know it's a street car on steroids, but it still feels like an LJ Torana; I just wish it were legal to drive it on the street!"

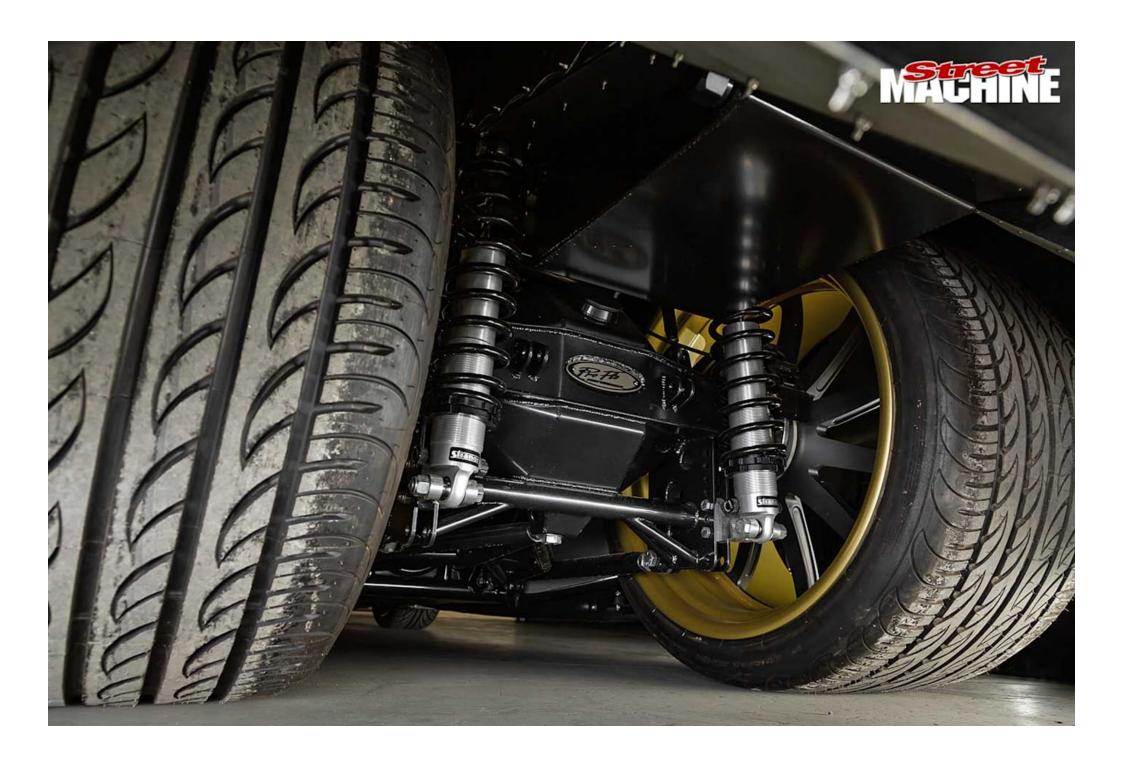


While it currently rolls on 20x7 and 24x15in Schott F10 wheels, once the LJ goes to the track it will wear 17x4.5in front-runners and double-beadlocked 15x14in hoops wrapped in 33x15in slicks out back

Standing out today in the pantheon of hardcore streeters is a tough ask, with crazy power figures and record ETs popping up regularly, but the ProFlo LJ pushes the envelope hard thanks to its Doorslammer DNA, which was needed to satisfy the customer's colossal ambitions.



Amazingly, the Torana retains original-spec winding glass windows and opening glass vent windows, along with glass front and rear screens. "It has blinkers, horn, headlights and tail-lights, like a real street car," laughs Paul "We threw around some ideas about whether he wanted to go blown and injected or big-cube aspirated, and he wound up deciding to go that way," says Paul. "For me, back then that meant maybe 760ci, like Mark Hayes's car [SM, Feb '15]. I played around with specs for a build like that and approached Milan, who told me that wasn't big enough; it didn't push the envelope far enough.



ProFlo built a custom four-link in the rear with a Mark Williams anti-roll bar set-up, as well as a custom double-A-arm front end with a Stiletto steering rack attached to a race-style aftermarket 'moly column. Double-adjustable Strange Engineering coil-over struts hold the LJ at that menacing ride height, while Wilwood 14in rotors and six-piston brakes live up front and Strange discs do the stopping out back

"We hit Sonny's website and the pump gas motor they had at that time was about 820 cubes, and he still wanted more. I spoke to Sonny's and they put this 940ci package together for us, and that satisfied my client's needs," laughs Paul. "It's just like any other engine, really, but on a much larger scale. It is basically just like a V8 on steroids. The intake rocker is massive, and the pushrods look like fence posts; they're 13 inches long! I don't think people comprehend 940 cubes, or 15.4 litres, means it is nearly two litres per cylinder."

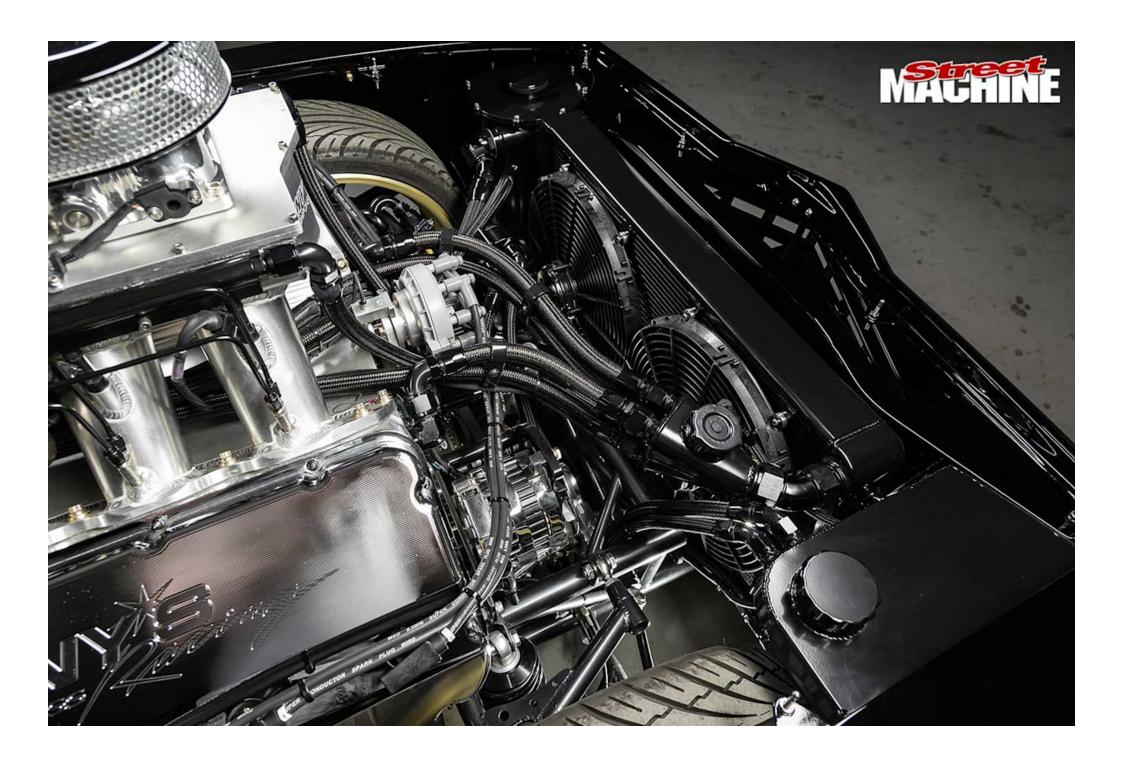


Spanning a 5.45-inch bore, 5.875-inch stroke and 5.3-inch bore spacing, the billet aluminium motor wears Sonny's own hemispherical heads, packing Manley titanium valves, PSI valve springs and a T&D rocker system designed to SAR's specs. Trend pushrods operate Jesel 1.062-inch keyed solid lifters, which ride on a 70mm solid-roller cam of Sonny's own specs.



"We went with the biggest Shaun's Custom Alloy radiator we possibly could fit and put a pair of Spal 16in thermo fans on it," says Paul. "It seems to idle fine at 150-160°F, and just hangs there"

The bottom end features a Bryant billet crank, Carrillo steel conrods, and Wiseco endurance pistons for an estimated 11.5:1 compression ratio. There is a Dailey Engineering five-stage dry sump oiling system, MSD crank trigger and Grid-based ignition system, plus a Sonny's sheet-metal intake wearing a pair of gigantic Accufab throttlebodies capable of swallowing 2300cfm each.



The LJ has a 65L fuel tank out back, which pumps forward to a header tank mounted next to the custom radiator, which then supplies the mountain motor. "It runs a smaller electric feeder pump to bring the fuel up to the header tank and then has an Aeromotive Terminator pump up front to feed the engine," says Paul Breathing through a set of custom 25/8-inch primaries and a dual five-inch exhaust system, the SAR940 produces 1630hp and 1360lb-ft on 92MON-octane fuel. Waiting in the wings is another 500hp worth of nitrous fed via two kits.



If you want to understand just how ludicrously massive this donk is, compare it to a couple of Chev crate motors. The base 350 SBC has a 4.0in x 3.48in bore and stroke, while Chev's baddest big-block, the 572ci ZZ572, runs a 4.560in bore and 4.375in stroke. The SAR940 rocks a 5.045in bore and 5.8750in stroke!

For engine management, ProFlo stuck with what they knew, which threw a slight curveball to SAR. "Sonny's stuff normally runs BigStuff3, but we tend to use FuelTech," says Paul. "So the owner of FuelTech went to Sonny's and dyno-tuned the engine for us, and now they have a relationship between those companies."



Ontrak Automotive, run by Paul's brother Mark, was given the nod to wire the car from front to back, including hooking up the huge amount of data acquisition the guys will need once they take the LJ to the strip.

"The wiring was really involved because we need to datalog so much," Paul says. "We have tailshaft speed sensors, oil pressures, oil temperatures, converter pressure, pyros in the headers and more."



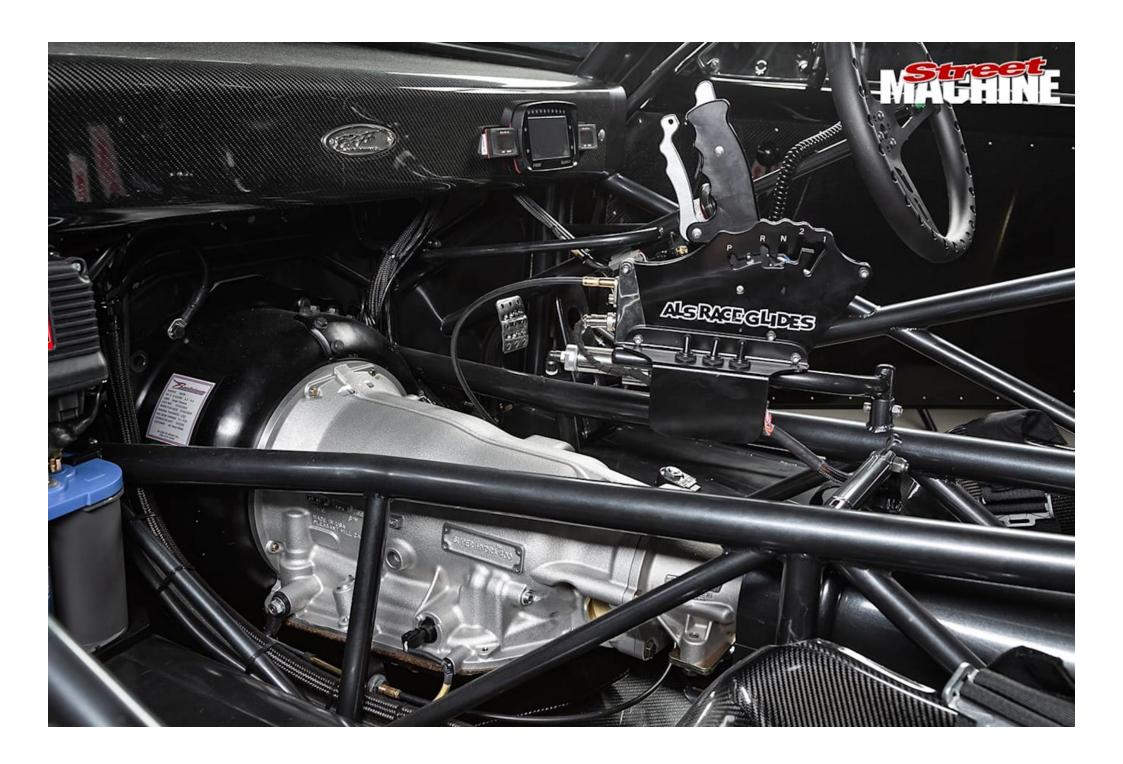
Of course, that stupendous engine is only half the story, as the LJ two-door wrapped around the biggest-block is a piece of art in itself. Sitting slammed to the ground over a custom-built chassis, it looks more ready to take on Pro Mods than wear road tags.

The LJ actually came into ProFlo as a bare shell, which had been in storage for a number of years. This worked out well for Paul and the crew, as it meant the exterior bodywork was in good condition for its age, though it didn't stop them from cutting it up to jam that ludicrous motor up front.



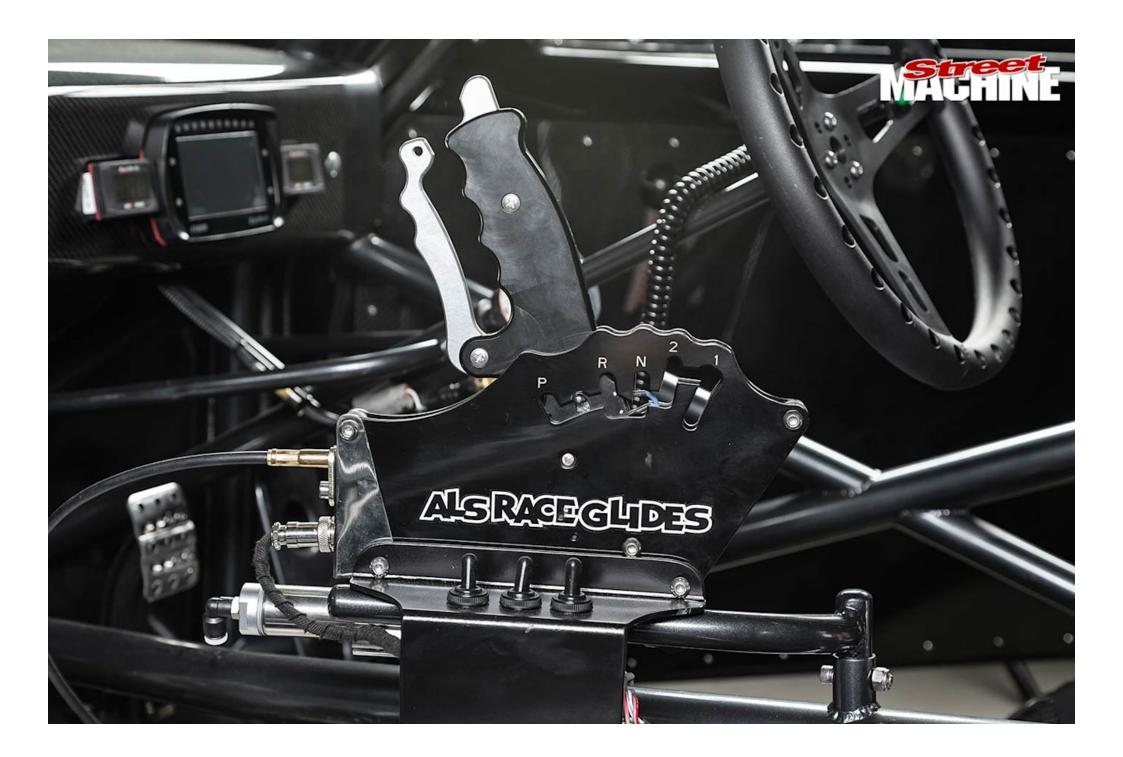
"We had the engine, as we ordered it six months prior and had it waiting for when the shell turned up," Paul says. "We tried to fit it in the original bay, but obviously there was no chance of that, and that was when the project really turned into more of a race-style car. Trying to fit 20s up front that also turn with the car when it's that low was another huge hurdle to overcome."

Everything is Holden steel apart from the bonnet and bootlid, which had to be replaced through necessity.



"We got the Pro Mod two-speed Turbo 400 'box from Al's Race Glides and he consulted with Sonny's to work out what we'd need, plus we got a 5500rpm Neal Chance Racing converter out of the USA to match it all up," Paul says. "We also built the fabricated diff with 40-spline full-floater axles and a 9.5in centre running 3.25:1 gears"

"We had to go for a custom bonnet, as we deleted the scuttle panel beneath the windscreen," explains Paul. "We extended a steel bonnet to the windscreen and then made a scoop, which formed the plug for the fibreglass. We made the bonnet and boot thick because we knew the car was going to be painted black. The weight is the weight; we didn't want it moving around.



"In terms of the engineering and the build of the car, it is really a race car, but we wanted to give it a real street look when we debuted it," explains Paul. "Basically, from the firewall back, it's a Doorslammer. We probably spent eight months in fab, as the rear guards are stretched, the front guards are stretched forwards, it has front and rear engine plates, it runs a Funny Car-style 'cage, and all the floors and interior are new."



"The carbon tubs and flat sheet are JBRC race products from the USA, while the carbon seats and dash were custom-made locally," Paul says. "It is all proper carbon, which cuts weight out, and it looks sick"

Once the fab work was done, the chassis was blasted and powdercoated at Peter Snell's Protective Coatings before being sent to Danny Makdessi at Custom Bodyworks for paint and panel. Seven weeks prior to Summernats 33, the painted shell was dropped back to ProFlo and the race was on to be ready. Amazingly, the ProFlo team had the car running before Christmas, and unveiled it to the public on 3 January during the Meguiar's Great Uncover at Summernats.





"I'm lucky enough to have some pretty out-there customers, and I think the ProFlo team can take their dreams and not just make them come true but go further," says Paul. "We'll take the car to MotorEx in this guise, but by the end of the year I'd like to get it to the track. "I really want to go as fast as we can on pump gas. It should run low sevens on pump gas, and with the nitrous it should be down around a 6.50 range."



It might never have a hope of passing a roadworthy, but the impact of this car proves just how much vision some people have, and shows how crazy street cars could be if street machiners were allowed to set the rules.

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**MILAN** 

**1972 HOLDEN LJ TORANA** 

Paint: PPG Black

**ENGINE** 

**Brand:** Sonny's Racing Engines 940ci

**Induction:** Sonny's sheet-metal intake, Accufab 2300cfm throttlebodies

**ECU:** FuelTech FT600 **Nitrous:** Two 250hp kits

**Heads:** SAR billet hemispherical **Camshaft:** SAR 70mm solid-roller

**Conrods:** Carrillo steel

**Pistons:** Wiseco **Crank:** Bryant billet

Oil system: Dailey five-stage dry sump

Fuel system: Aeromotive Terminator pump, 2000cc injectors

**Cooling:** Shaun's Custom Alloy custom radiator, twin 16in Spal thermo fans

**Exhaust:** Custom ProFlo 25/8in headers, dual 5in exhaust

Ignition: MSD crank trigger, MSD Power Grid

**TRANSMISSION** 

**Gearbox:** Pro Mod two-speed TH400 **Converter:** 5500rpm Neal Chance Racing

**Diff:** ProFlo fabricated 9in, full-floater, 40-spline axles, Tom's centre, 3.25:1 gears

**SUSPENSION & BRAKES** 

**Front:** Strange double-adjustable coil-overs, ProFlo tube arms, Pro-Werks Stiletto steering rack

**Rear:** Strange double-adjustable coil-overs, ProFlo four-link

**Brakes:** Wilwood 14in discs and six-piston calipers, (f), Strange disc brakes (r)

Master cylinder: Wilwood

**WHEELS & TYRES** 

**Rims:** Schott F10; 20x7 (f), 24x15 (r)

**Rubber:** Winrun 225/25/20 (f), Pirelli 405/25/24 (r)

**THANKS** 

All the boys at ProFlo Performance; Mark at Ontrak Automotive; Danny and the crew at Custom Bodyworks; Al's Race Glides; Peter Snell's Protective Coatings